

frequently, the anterior horns rarely. In 17 cases, the cord had a tumor-like swelling at the point affected. In 11 of these cases, the disease extended beyond the boundaries of this swelling. The cavity in the cord varied greatly in size. As to the symptoms there was much diversity. In a few cases they were wanting. In the large majority severe pain was present, greater in the extremities than in the body. Partial anaesthesia was present in 17 cases—the loss of pain sense being especially noticeable—in one case being general, in one case being so complete that fracture of the bones occurred without pain. The paralysis is the most constant symptom—usually of the legs, often of the arms, sometimes of both. Disturbance in the genito-urinary and rectal mechanisms is frequent. The sudden change and alternation of symptoms, rapid improvement and then relapse, is quite characteristic of central glioma, as of all intramedullary tumors. As to the therapeutics, the only comment is in regard to hot baths which were found to hasten the progress of the affection.

M. A. S.

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#### THERAPEUTICS OF THE NERVOUS SYSTEM.

**On the use of Galvanism in the Treatment of certain forms of Insanity.** By JOSEPH WIGGLESWORTH, M.D., Lond., Rainhill Asylum. (*Journal of Mental Sc.*, Oct., 1887.)

The author reports upon his experiences with the use of the galvanic battery in the treatment of insanity. By way of preface, he makes some very simple and elementary remarks upon the use of the galvanic battery. From his mode of application, we should say that it is not only important for him to use a galvanometer, but a good rheostat would be of good service, for he has used currents as strong as 25 (!) milliampères, applying the cathode to the forehead and the anode to the nape of the neck. We do not marvel that one patient resisted a good deal as the strength (of the current) was increased, or that one patient, suffering from melancholic stupor, developed a wild maniacal attack under this treatment; nor is it surprising that others "disliked the applications immensely." If the author wishes to study the effects of galvanism upon the insane, let him use milder currents, and we think he will obtain the same if not better results. The author concludes (1) "that whilst the use of galvanism to the head is a proceeding which is certainly *not* going to revolutionize the treatment of insanity, this agent is nevertheless one that is capable of doing much good in certain selected cases, and that, by its judicious (*sic*) employment, we may every now and then cure cases which would otherwise drift into hopeless chronicity. (2) The class of cases which offers the best field for the employment of this agent is that which includes examples of mental stupor and torpor cases, which are grouped under the specific designations of *melancholia attonita* and so-called 'acute dementia,'"

B. S.

**Zur Toxicologie des Paraldehyd.** Prof. Dr. EUGEN FÖHNER. (*Berl. Med. Woch.*, Sept. 12th, 1887.)

The author has experimented with paraldehyde on animals (horses in particular), and has found that the drug is not as innocent a one as it is claimed to be. The continued use of this drug produces not only a condition resembling the state of chronic alcoholism, but brings about very marked changes in the structure of the blood-corpuscles. It is a powerful oxidizing and reducing agent. A horse was given a large dose of paraldehyde, not sufficient to produce hypnotic condition, and yet the blood-corpuscles had undergone extreme changes. In carnivorous animals, if the toxic effects had been attained, a condition resembling pernicious anaemia was established. The author fears that a similar condition might result from the long-continued exhibition of the drug in man. This we doubt, for we have seen it used for months without such effects, and furthermore, the hypnotic effects of the drug upon the human body are obtained with relatively small quantities, long before the toxic effects would be reached.

**On the Treatment of Neuralgias by Kataphoric Action.** (*Deutsche Med. Wochenschr.*, No. 39, 1887.) By Prof. ADAMKIEWICZ, in Krakow.

At the medical conference recently held, Prof. A. returned to the subject of the treatment of neuralgias by means of his diffusion electrode. A. claims that nothing will heighten the efficacy of a therapeutic agent as combining it with an agent of similar properties. The anode having the power of reducing the excitability of nerves, that action will be reinforced if a substance like chloroform be introduced into the skin under the action of the anode. It is now proved beyond a doubt that the chloroform does penetrate into the skin and parts below, but not very far beneath the skin. The author, therefore, recommends these applications in cases of neuralgias of superficial nerves rather than in case of sciatica for example.

Several cases are cited of severe supraorbital neuralgia which were relieved at once by the application of the anode taken with chloroform over the painful point, increasing the current gradually up to 7 MA. The method is well worth a trial, particularly in acute cases.

B. S.

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**On the Prognosis and Treatment of Locomotor Ataxia.** M. BENEDIKT. (*Wiener Med. Presse*, 1887, Nos. 33 u. 34.)

Benedikt divides the cases of locomotor ataxia into several categories whose prognosis differs widely. The first group, in which the prognosis is most favorable, consists of the cases which begin with atrophy of the optic nerve. This particular symptom is, it is true, incurable, but the course of the disease is slow and extreme motor symptoms rarely develop.

The second group is made up of the cases with prodromal gastric crises. In these the prognosis as to the development of motor symptoms is not so absolutely favorable as in the first group, but the motor symptoms subside in two-thirds of the cases.

The third group contains the cases of dementia paralytica ascendens, with complicating tabes. In this group it is the rule that the spinal symptoms are limited to the loss of pupil and tendon reflexes and to the development of the Romberg symptom (swaying when standing with eyes closed). That it is not a matter of indifference that the ataxia does not go on, even though the cerebral process progresses, is evident, since the care of such patients is much easier when the spinal symptoms subside. (May these be cerebral ataxia?)

A fourth group with relatively favorable prognosis is made up of the cases in which the symptoms develop rapidly within a few weeks and soon reach a high pitch of intensity. These cases are often maltreated and hence do not recover. Antisyphilitic treatment, galvanism, and hydrotherapeutic measures are here of no use. The patients should have absolute rest with the most antiphlogistic treatment. (May these be cases of neuritis?)

A fifth group with a fairly favorable prognosis consists of tabetic patients in whom syphilis is the manifest cause of the disease. An atypical course of the case will awaken suspicion of syphilis, but the only criterion is the result of an antisyphilitic course of treatment. Such a course must be carefully conducted, routine injunctions being avoided. It may be stated that Benedikt does not accept syphilis as a universal factor in the causation of tabes.

The sixth group, whose prognosis is unfavorable, is made up of the cases which present the typical picture of the disease, though even a few of these may recover.

As to treatment, the author recommends strongly galvanism and hydrotherapy, giving, however, no sufficient details regarding his methods of applying these agents. He admits that great patience is needed and that treatment must be kept up for a long while. In the hyperæmic stage which is present in the rapidly advancing cases, ice to the back, absolute rest, wet cups, and the internal use of ergot and of nitrate of silver are the means recommended. In the syphilitic cases, hypodermatic use of corrosive sublimate is advocated. He considers nerve stretching as one of the most important means of treatment (a means, however, which has not found favor with any other neurologist of note and has been abandoned everywhere, excepting in Benedikt's clinic).

While it seems improbable that in any case where sclerotic processes have occurred in the spinal cord a true recovery from the symptoms of sclerosis can follow, it must not be forgotten that two such cases have been recorded by so good an authority as Schultze, of Heidelberg, in which, though the symptoms of tabes disappeared, subsequent post-mortem examination showed the

persistence of the lesion. These cases can only be explained upon the supposition of a vicarious action in the nervous system, the rôle of one set of fibres and cells being undertaken by another set.

M. A. S.

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**A Case of Tetanus Cured by the Hypodermic Injection of Cocaine.** By LOPEZ. (*El Genio Med. Quir.*, 1887. Quoted in *Gaz. Degli Ospitali* June 5, 1887.)

M. G., 50 years old, having worked in the cold and wet, complained of rheumatic pains in the back and extremities. Three days after he had an attack of opisthotonus and painful spasms and all the symptoms of idiopathic tetanus. Morphine and chloral hydrate were prescribed. For three days the patient, under the influence of these medicines, had little pain, but there were increased muscular rigidity and spasms. At last he was unable to swallow, and death was believed imminent. Injections of morphine were without effect. Then the writer injected three syringefuls of a mixture of morphine and cocaine, 5% of each. The effect was immediate. After two hours he could move the extremities, open his mouth and turn himself in his bed. The next day he continued to improve. There remained a slight trismus and a little rigidity of the neck. A quarter of a syringe-ful of the same solution was injected in each side of the neck. The day after, all the symptoms had disappeared and in a few days the patient gained strength and was able to return to work.

GRACE PECKHAM.